

AMENDMENTS TO THE SPECIFICATION

The following replacement paragraphs are marked to show the changes made relative to the immediate prior version.

[0003] By way of background, a commonly assigned, co-pending patent application, which issued as US 6,714,694 B1 (U.S. Serial No. 09/721,726 (filed November 27, 2000) to Marshall entitled "A Method for Sliding Window Image Processing of Associative Operators" (Attorney Docket No. D/A0827)) (~~the '726 application~~) -- which is incorporated herein by this reference -- describes a method for fast computation of associative operators for a fixed size window in one dimension. As disclosed therein, by repeating the process, it may be extended to application to a rectangular window in two dimensions. However, the rectangular shape is usually not ideal for image processing operations. Regions that more closely resemble circles yield better results.

[0043] The initial steps of the method 500 includes obtaining an image and suitably storing an image in an array (step 502) and scanning the image array to determine the pixel values (step 504). Techniques for performing such scanning are well known in the art. The array is then segmented (or tiled) into blocks (or tiles) of the pixel values (step 506). The size of the blocks should be selected to be constant for the image and preferably is related to the size of the analysis window according to predetermined criteria. For example, the window size may be the same as the block or tile size. A desired associative operation is then performed on the pixel values of each block to determine the properties of each block (step 508). ~~As noted above, these~~ These associative operations (op) have an associative quality in that (x op y) op z = x op (y op z), and they can include MAXIMUM, MINIMUM, AND and OR. The sequential application of these operations depends on the shape and size of the selected window, as will be apparent from the description below.